

**AMENDMENT # 1 TO  
MEMORANDUM OF UNDERSTANDING  
AMONG  
THE UNITED STATES DEPARTMENT OF ENERGY  
AND  
THE GOVERNMENT OF THE REPUBLIC OF THE MARSHALL ISLANDS  
AND  
THE RONGELAP ATOLL LOCAL GOVERNMENT**

This Memorandum of Understanding ("MOU") is entered into among the United States Department of Energy ("DOE"), the Government of the Republic of the Marshall Islands ("RMI Government"), and the Rongelap Atoll Local Government ("RALGOV") (collectively the "Parties").

**Article 1  
Purpose**

The purpose of this MOU is to establish a framework for cooperation among the Parties to foster the timely and effective coordination of DOE's environmental monitoring support activities with RALGOV's phased resettlement of Rongelap Island.

**Article 2  
DOE Undertakings**

2.1 To assist RALGOV to achieve the objectives of its resettlement program, DOE will undertake the following activities, as set forth in the recommendations of the "Department of Energy Environmental Monitoring Support Plan for Rongelap Resettlement Activities" (hereinafter "DOE Support Plan"):

**Soil Remediation**

(1) Recommend depth of soil excavation and removal in the proposed housing and village area of Rongelap Island.

(2) Conduct sampling and analysis of surface soils in the housing and village area, following scraping of the area and before application of coral fill, to determine concentrations of plutonium 239+240, americium 241, and other radionuclides attributable to the U.S. nuclear testing program.

(3) Recommend amount, rate, and frequency of application of potassium chloride (KCl) fertilizer to agricultural areas.

(4) Conduct *in situ* gamma spectrometry (ISGS) to confirm effectiveness of soil removal in the housing and village area.

(5) Observe application of KCl.

(6) Collect and analyze samples of food crops after application of KCl.

(7) Conduct ISGS after application of coral fill.

#### Monitoring of Workers

(8) Monitor the exposure of construction and other workers directly involved in resettlement activities to gamma rays, and conduct plutonium bioassay (via urine sampling). DOE will pay one-half the cost of plutonium bioassay analysis, and will report the results of all testing.

(9) Recommend the use of, and provide technical information to RALGOV's contractor(s) regarding, half-face disposable respirator masks.

#### Training and Employment

(10) Conduct training of selected Rongelapese in whole body counting, health risk communication, dietary survey techniques, and KCl fertilizer application.

(11) As needed, hire technically qualified Rongelapese to perform whole body counting and related health physics tasks under DOE supervision and in accordance with written DOE protocols.

#### Well Water Sampling Analysis

(12) Collect groundwater samples from wells and analyze for cesium-137, strontium-90, plutonium-239+240, americium-241, and other radionuclides attributable to the U.S. nuclear testing program.

#### Utility Usage and Fuel Purchases

(13) Pay RALGOV (a) on a monthly billing basis, for metered electricity usage at the rate of \$0.47 per kilowatt/hour, and for metered water usage at the rate of \$110.00 per 1000 gallons of water used; and (b) within thirty (30) days of receipt of invoice, \$2.50 per gallon for motor gasoline and \$1.95 per gallon for diesel fuel.

## Communications

(14) Maintain close communications with RALGOV and RALGOV contractor(s) to ensure effective coordination of DOE's activities under the DOE Support Plan with the Rongelap resettlement program.

(15) At the request of, and with reasonable advance written notice from the RMI Government and RALGOV, participate in community meetings to keep RALGOV and the Rongelapese people apprised of DOE's activities under the DOE Support Plan.

(16) Report promptly the result of gamma ray exposure monitoring and urine bioassay testing, in writing and in easy-to-understand terms, to construction and other resettlement workers and, subject to the protection of monitored individuals' privacy, to the RMI Government, RALGOV, and RALGOV's contractor.

(17) Cooperate with the RMI Government to establish a publicly-available database of the testing and monitoring data reported by DOE in connection with the DOE Support Plan.

## Other DOE Activities

(18) Conduct resuspension studies to determine aerial distribution of plutonium-239+240.

(19) Assist in the conduct of a dietary survey of the resettled Rongelapese population.

(20) Provide recommendations concerning the application of KC1 on islands of Rongelap Atoll, other than Rongelap Island, where food gathering may be conducted.

2.2 DOE will undertake such other or additional environmental monitoring activities in support of the Rongelap resettlement program as the Parties may agree in writing.

## **Article 3 RALGOV Undertakings**

To assist in the implementation of the DOE Support Plan, RALGOV will:

(1) Establish an air-conditioned facility on Rongelap Island suitable to house a whole body counter and store supplies, and pay for the utilities necessary to maintain and operate the counter.

(2) Be responsible for obtaining any licenses or other approvals from the RMI Government for any material and equipment required for any DOE-assisted radiological monitoring, including equipment that emits low levels of ionizing radiation.

(3) Assist DOE with respect to the control and custody of any DOE equipment that is a radioactive source.

(4) Maintain close communication with DOE and DOE contractors to ensure effective coordination of DOE's activities under the DOE Support Plan with the Rongelap resettlement program.

(5) Permit DOE to place up to four (4) trailers at a suitable location(s) on Rongelap Island, for use by DOE and its contractors.

(6) Provide DOE's Field Operations Manager six (6) weeks' written notice in advance of the commencement of each of the following: (i) soil removal from the village and housing area; (ii) application of KC1 fertilizer; (iii) construction of housing; and (iv) application of crushed coral in housing/village area.

(7) Provide DOE's Field Operations Manager with reasonable advance written request(s) to participate in community meetings to keep RALGOV and the Rongelapese people apprised of DOE's activities under the DOE Support Plan.

(8) Cooperate with DOE's urine collection protocol for workers involved in resettlement activities and pay one-half the cost of plutonium bioassay analysis.

(9) Provide such other logistical support and/or operations and maintenance assistance to DOE as the Parties may agree to in writing.

#### **Article 4**

#### **RMI Government Undertakings**

To assist in the implementation of the DOE Support Plan, the RMI Government will:

(1) Facilitate the grant of any licenses or other approvals for any material and equipment required for any DOE-assisted radiological monitoring, including equipment that emits low levels of ionizing radiation.

(2) Provide DOE with reasonable advance written request(s) to participate in community and other meetings to keep the RMI Government, RALGOV, and the Rongelapese people apprised of DOE's activities under the DOE Support Plan.

(3) Cooperate with DOE to establish a publicly-available database of the testing and monitoring data reported by DOE in connection with the DOE Support Plan.

(4) Provide such other assistance to DOE as the Parties may agree to in writing.

## **Article 5**

### **General Conditions**

5.1 Any notice of other communication in connection with this MOU will be in writing. All notices, requests, and other communications under this MOU will be given to or made upon the respective Parties as follows:

If to the RMI Government:

Minister of Foreign Affairs and Trade  
P.O. Box 1349  
Majuro, Republic of the Marshall Islands  
Facsimile: 011-692-625-4979

If to RALGOV:

Rongelap Local Atoll Government  
Office of the Mayor  
P.O. Box 1766  
Majuro, Republic of the Marshall Islands  
Facsimile: 011-692-626-5400

with a copy to:

Howard L. Hills, Esq.  
550 Brooks St.  
Laguna Beach, CA 92651  
Telephone: 949-376-8280 (Laguna Beach, CA)  
202-363-8436 (Washington, D.C.)  
Facsimile: 949-376-7572

If to DOE:

Mr. Steven V. Cary  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585  
Telephone: 202-586-6151  
Facsimile: 202-586-1413

If to DOE's Field Operations Manager:

Mr. William D. Jackson  
U.S. Department of Energy  
Pacific Area Support Office  
P.O. Box 29939  
Honolulu, HI 96820-9211  
Telephone: 808-422-9211  
Facsimile: 808-422-9217

5.2 Governing law: The laws and regulations of the United States will govern this MOU, as set forth in the Compact of Free Association between the RMI Government and the United States of America and in the Federal Programs and Services Agreement concluded pursuant thereto. All questions relating to the MOU arising during its term will be settled by the Parties by mutual agreement.

5.3 It is understood that the ability of DOE to carry out its undertakings under the MOU and the DOE Support Plan is subject to the availability of appropriated funds.

### **Article 6**

#### **Commencement, Amendment, Renewal and Termination**

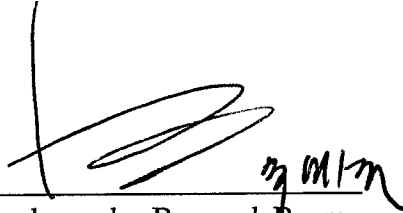
6.1 The term of the MOU is extended for one (1) year, from June 4, 2002.

6.2 By written agreement of the Parties, and with the concurrence of the U.S. Department of the Interior, this MOU may be amended at any time, and may be renewed for additional periods.

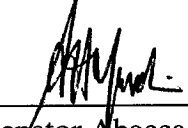
6.3 This MOU may be terminated by written agreement of the Parties, or may be terminated by any Party upon ninety (90) days written notice to the other Parties.

#### **ACCEPTANCE:**

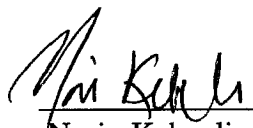
Date: 6/4/02

  
\_\_\_\_\_  
Ambassador Banny deBrum  
Republic of the Marshall Islands

Date: 6/04/02

  
\_\_\_\_\_  
Senator Abacca Anjain-Maddison

Date: 6-4-02

  
\_\_\_\_\_  
Norio Kebenli  
Acting Mayor  
Rongelap Atoll Local Government

Date: 6/4/02

Steven V. Cary  
Steven V. Cary  
Deputy Assistant Secretary  
Office of Health Studies  
U.S. Department of Energy

**ACKNOWLEDGED BY:**

Date: 6/4/02

Nikolao Pula  
for Nikolao Pula  
Acting Director  
Office of Insular Affairs  
U.S. Department of the Interior